

# **Hole in the Ground Ecological Management Unit Compartments 204 and 205**

## **FINAL Decision Notice and Finding of No Significant Impact for Timber Harvest and Associated Activities**

**Scott County, Arkansas**

**Responsible Agency:**  
US Forest Service  
Ouachita National Forest  
Poteau-Cold Springs Ranger District

**Responsible Official:**  
District Ranger Jonny Fryar  
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Booneville, AR 72927

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**December 2017**

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**DR 4300.003 USDA Equal Opportunity Public Notification Policy (June 2, 2015)**

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## Proposed Action

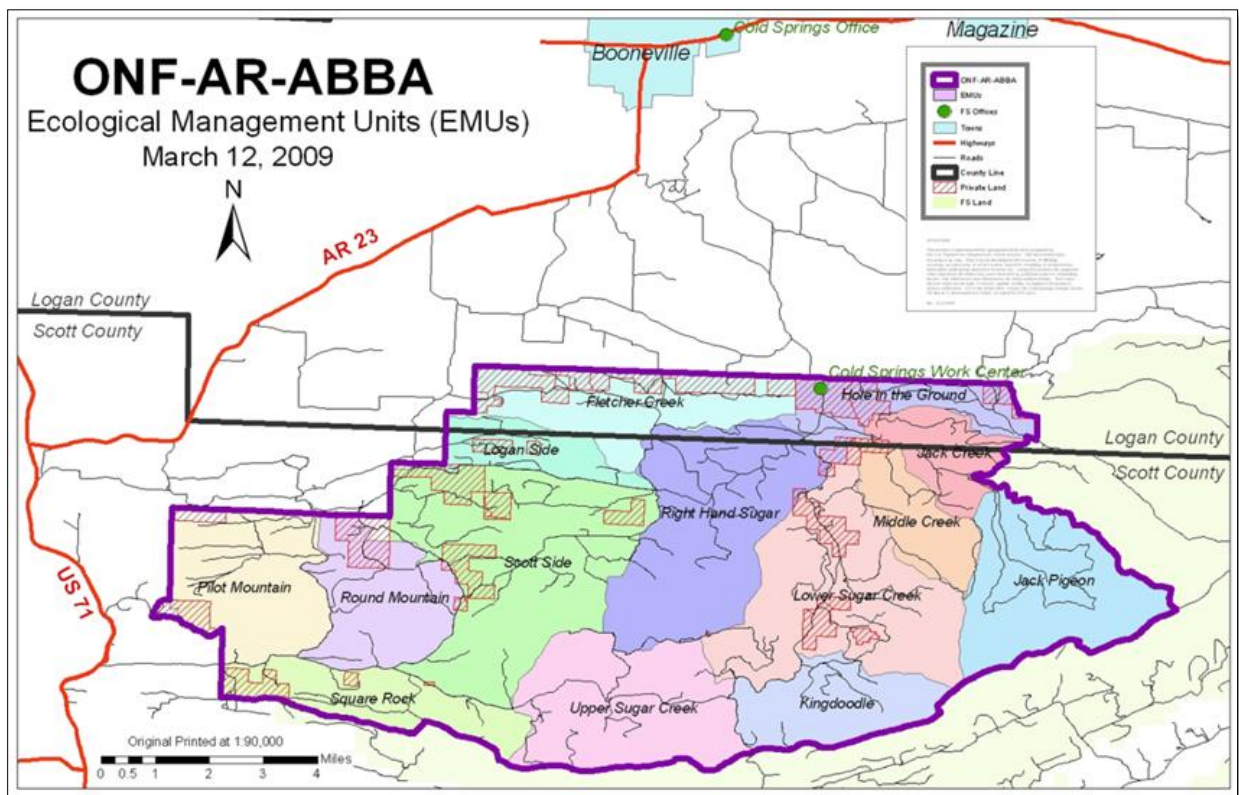
*Hole in the Ground* is located in mostly in Logan County, Arkansas extending down into Scott County, AR in Township 4 North, Range 27 West, Sections 1-4 and Township 4 North, Range 26 West, Section 6. This project area is approximately 7 miles southeast of Booneville, Arkansas, just south of the small community of Sugar Grove, Arkansas.

This area is in the northern portion of the Ouachita National Forest. Most of the private land is in Compartment 204 in the northwest portion of the project area. There are areas of private in the southwest and northeast of *Hole in the Ground*. Local sites include Jack Creek Recreation Area, Knopper's Ford Recreation Area, Buck Ridge Rifle Range, Hole in the Ground Trail, and Sugar Creek Hiking Trail which all lie south of the project area. Dry Creek Wilderness Area is adjacent to the east. There are county roads and various "dead-end" Forest Service roads leading into and within the project area. Forest Development Roads (FDRs) 19 and 141 lead into the project area on the southwest side. FDR 284 (Garner Road) runs east to west in the northern portion of *Hole in the Ground*. FDR 51 enters the project area on the southeast side.

Hole in the Ground **project area** contains 1,501 acres of national forest lands. These forested acres include 1,191 acres suitable for timber production.

The project area falls mainly within three large watersheds, Huckleberry Creek, Sugar Creek, and Dry Creek-Petit Jean River.

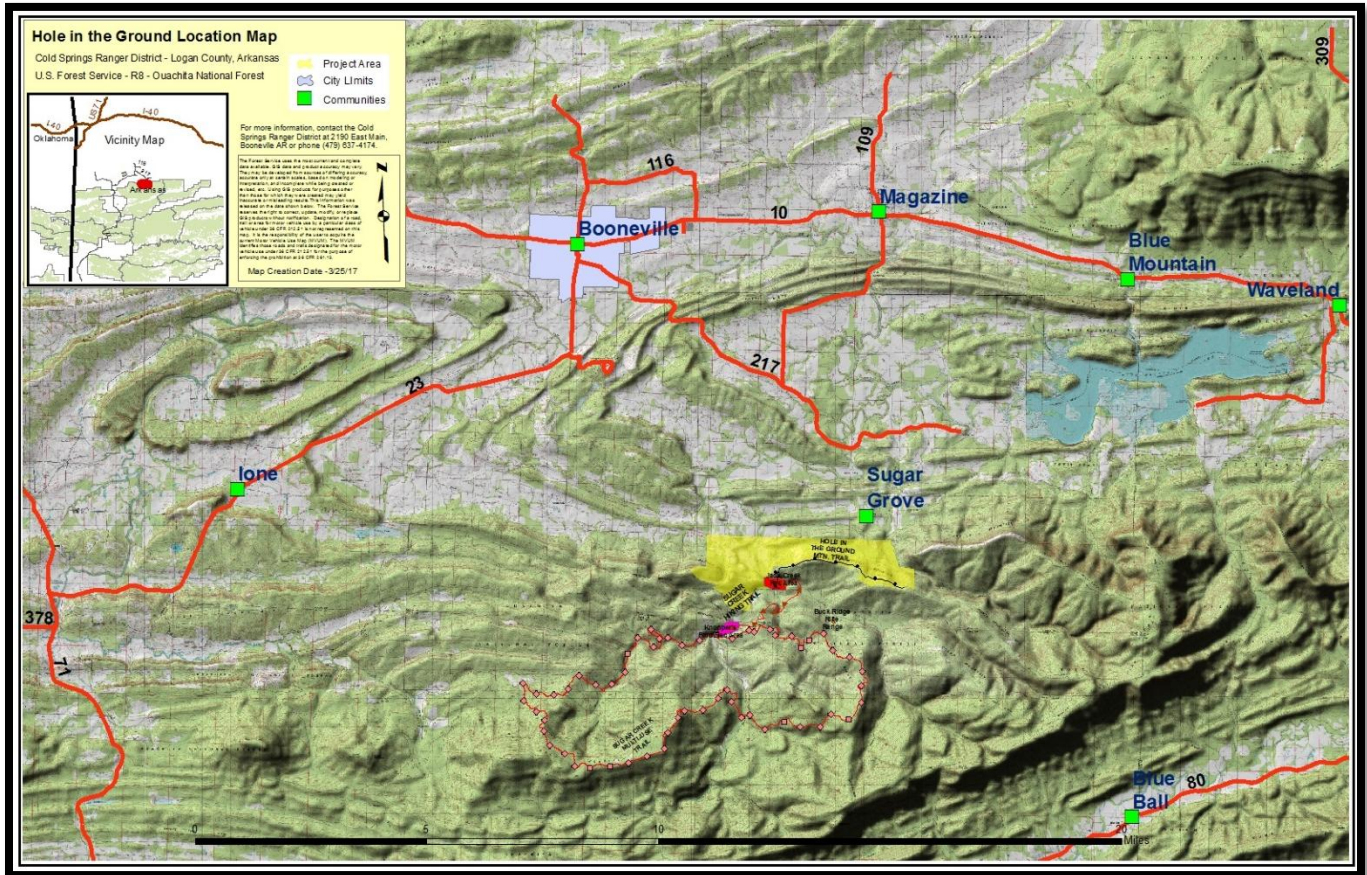
This project area falls within the habitat area for the endangered American burying beetle (ABB) on the Ouachita National Forest. The proposed activities should move this project area toward the desired habitat for this species by creating an open woodland condition by utilizing methods such as timber harvest, stand improvements and prescribed burning. See map of project areas in the American burying beetle Area (ABBA) below.



An Environmental Assessment (EA) was prepared by the interdisciplinary team (IDT) to address the environmental

effects of implementing the Proposed Action, Alternative I (No Action), and Alternative II (Proposed Action without herbicide use). The EA is available for public review in the Cold Springs Ranger District Office in Booneville, Arkansas, and at [www.fs.usda.gov/project/?project=51599](http://www.fs.usda.gov/project/?project=51599).

Below is a map of the project area.





The ecosystem management activities proposed are detailed below.

<b>PROPOSED ACTION SUMMARY OF TREATMENTS PRESCRIBED</b>	<b>C-204</b>	<b>C-205</b>	<b>TOTAL</b>
<b>HARVEST TREATMENTS*</b>			
Seed Tree (acres)	42	110	<b>152</b>
Thinning with 20' Spacing (acres)	0	37	<b>37</b>
Thinning to Target of 70 BA pine (acres)	0	17	<b>17</b>
Thinning to Target of 70 BA pine; minimum 10% Hardwood Component (acres)	97	362	<b>459</b>
<b>TOTAL HARVEST TREATMENTS</b>	<b>139</b>	<b>526</b>	<b>665</b>
<b>FUELS TREATMENT**</b>			
Multi-purpose (approx.. 3-5 Year Rotation: General Forest Area) (acres)	478	1023	<b>1501</b>
Fireline Maintenance (miles)			<b>5.1</b>
Fireline Construction (miles)			<b>10</b>
Fireline Protection of Cemeteries (#)			
<b>SILVICULTURE TREATMENTS***</b>			
Reforestation Site Preparation (acres)	51	115	<b>166</b>
Timber Stand Improvements-Release (acres)	141	155	<b>296</b>
Timber Stand Improvements-Pre-commercial thinning (acres)	141	155	<b>296</b>
<b>WILDLIFE TREATMENTS</b>			
Wildlife Stand Improvements - option to use herbicides or mechanical (acres)	97	379	<b>476</b>
Pond Reconstruction (#)	1	2	<b>3</b>
Pond Construction (#)	2	5	<b>7</b>
Nest Box Installations (#)	8	14	<b>22</b>
Wildlife Openings from Logging Decks (#)			<b>45</b>
<b>TRANSPORTATION TREATMENTS</b>			
Road Reconstruction (miles)			<b>1.07</b>
Pre-Haul Maintenance (miles)			<b>6.04</b>
Temporary Roads (miles)			<b>2.56</b>
Road Obliteration (miles)			<b>0.70</b>
<b>OTHER TREATMENTS</b>			
Firewood Areas (yes/no)			<b>YES</b>
Landline Maintenance (miles)			<b>5.25</b>
Hole in the Ground Trail Maintenance			<b>YES</b>
NNIS Treatment with herbicides (yes/no)			<b>YES</b>

\*Hardwoods may be harvested in stands identified for treatment, where available, leaving a minimum hardwood component of 10 percent of the residual stand or 10 basal area per acre.

\*\*Firelines would be constructed around perimeters of all natural and artificial regeneration areas (i.e. shelterwood, seedtree, or existing regeneration areas). The mechanically constructed fireline would be bladed down to mineral soil and approximately 8 feet wide. Bladed lines would be water barred as necessary on slopes to limit soil movement. Firelines would normally be installed within 50 feet either side of stand boundaries. The purpose of a fireline is for "control" if a prescribed fire is applied to the stands for site preparation and/or to exclude fire during years of stand development.

\*\*\*All Regeneration Stands would have reforestation and timber stand improvement activities (Site Preparation, Release, Mechanical Scarification, and TSI (multiple times if necessary). If activities are not successful, rip and plant with shortleaf pine; hand tool release, herbicide, and pre-commercial thinning may be utilized.) These activities may be repeated as necessary to obtain adequate shortleaf pine regeneration.

**Permits** would be offered to the public for collection of rocks by private individuals within road construction and reconstruction corridors. That is, rocks can be collected within areas of disturbance associated with road construction and reconstruction. Firewood and shale pit permits may be issued.

**Red-cockaded Woodpecker (RCW) Treatments** – If a new RCW cavity tree or a cavity tree cluster is discovered in the process of implementing a timber harvest decision in management areas other than Management Area 22 (i.e. MA 14, 17, 21), the RCW Species Recovery Plan and Ouachita National Forest Revised Forest Plan standards would apply and management of that cavity tree or cavity tree cluster area would begin immediately. In the event a new RCW cavity tree is found or started within this project area, the immediate area, including streamside management zones (Revised Forest Plan standard 22.05 pp. 120), that surround the tree (10 acres) would be identified as an active cluster and all activities associated with enhancing and protecting the cluster would begin. Other activities would include use of cavity restrictors, snake and squirrel excluder devices, artificial cavities, single-bird augmentations, multiple-bird group-initiations, brush hogging in cavity tree clusters, removal of southern flying squirrels, population/nest monitoring, cavity maintenance and southern pine beetle (SPB) and Ips control efforts. In active, inactive, and recruitment clusters, retain no more than 10 square feet of basal area per acre in overstory hardwoods. Remove all hardwoods within 50 feet of cavity trees. (Revised Forest Plan pg 122; 22.17).

#### Matrix of Needed Road Work Hole in the Ground Mountain EMU

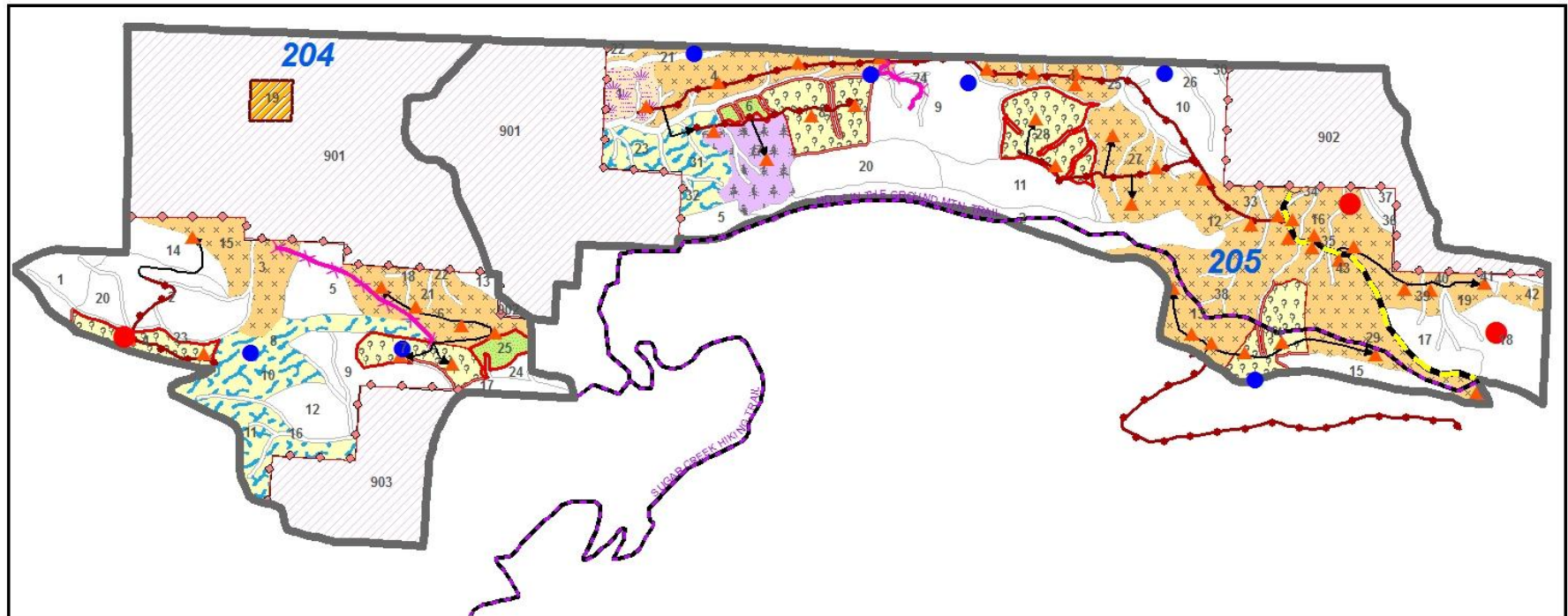
Road Name	Segment	Type of Work	Description
141	N/A	Reconstruct	Reconstruct Bridge over Jack Pidgeon Creek for approx. 0.10 miles (5.0 Engineering Project)
51	N/A	Reconstruct	Reconstruct approx. 0.97 miles of this road from intersection of road 141.
			<b>Total Reconstruction – 1.07 miles.</b>
S21	NA	Prehaul Maintenance	1.54 miles of brush hogging or dozer work to clean ditches, maintain drainage structures, and add surfacing where needed. Road will be open after harvest.
284	NA	Prehaul Maintenance	2.40 miles of brush hogging and dozer blading to smooth road bed; add surfacing, clean ditches and maintain drainage structures where needed. Road will be open after harvest.
S04B	N/A	Prehaul Maintenance	0.60 miles of brush hogging and dozer blading to smooth road bed; add surfacing, clean ditches and maintain drainage structures where needed. Road will be closed after harvest.
S05B	N/A	Prehaul Maintenance	1.50 miles (0.80 miles on west end, 0.70 miles on east end) of brush hogging and dozer blading to smooth road bed; add surfacing, clean ditches and maintain drainage structures where needed. Road will be closed after harvest.
			<b>Total Prehaul Maintenance = 6.04 miles</b>
NA	NA	NA	NA
			<b>Total Construction = 0.0 miles</b>
S04	N/A	Obliterated by Nature	0.40 miles obliterated by nature
S05A	NA	Obliterated by Nature	0.30 miles obliterated by nature
			<b>Total Road Obliteration – 0.70 miles</b>
Temp Roads			2.56 miles – Many of these are old roads that would be opened. A few would be new. All temporary roads would be closed after harvest.
Various		Decks	Approximately 45 decks to be seeded as temporary wildlife openings.

STAND	ACRES	LAND	DESCRIPTION	FUELS	HARVEST				SILVICULTURE			WILDLIFE			
C-204		CLASS		Burn 3-5 Year Rotation	Seed Tree	Commercial Thinning			Reforestation	TSI		WSI	Nest Boxes	Pond	Pond
						70 BA pine; min 10% hwd comp	70 BA pine	20' spacing	Site Prep	Release	PCT			New	Reconst
1	22	820		22											
2	47	500	Suitable	47											
3	22	640		22		22						22			
4	20	500	Suitable	20	20				20	20	20		2		1
5	27	500	Suitable	27											
6	53	500	Suitable	53		53						53			
7	22	600		22	22				22	22	22		4	1	
8	27	600		27						27	27		2	1	
9	31	640		31											
10	29	600		29						29	29				
11	34	600		34						34	34				
12	21	500	Suitable	21											
13	4	828	Drain	4											
14	21	500	Suitable	21											
15	22	500	Suitable	22		22						22			
16	11	828	Drain	11											
17	12	828	Drain	12											
18	1	828	Drain	1											
19	11	860	Work Center	11											
20	10	827		10											
21	1	828	Drain	1											
22	1	828	Drain	1											
23	13	828	Drain	13											
24	7	500	Suitable	7											
25	9	500	Suitable	9					9	9	9				
901	419		Private												
902	2		Private												
903	118		Private												
<b>TOTAL</b>	<b>1017</b>			<b>478</b>	<b>42</b>	<b>97</b>	<b>0</b>	<b>0</b>	<b>51</b>	<b>141</b>	<b>141</b>	<b>97</b>	<b>8</b>	<b>2</b>	<b>1</b>

STAND	ACRES	LAND	DESCRIPTION	FUELS	HARVEST				SILVICULTURE			WILDLIFE			
C-205		CLASS		Burn 3-5 Year Rotation	Seed Tree	Commercial Thinning			Reforestation	TSI		WSI	Nest Boxes	Pond New	Pond Reconst
						70 BA pine; min 10% hwd comp	70 BA pine	20' spacing	Site Prep	Release	PCT				
1	17	500		17			17					17			
2	57	821		57											
3	25	500		25		25						25			
4	56	500		56		56						56			
5	13	821		13											
6	5	500		5					5	5	5				
7	37	500		37				37							
8	40	500		40	40				40	40	40		4	1	
9	69	500		69									2	1	
10	52	500		52									2	1	
11	41	500		41											
12	48	540		48		48						48			
13	61	500		61		61						61			
14	31	500		31	31				31	31	31		4	1	
15	19	821		19											
16	59	500		59		59						59			1
17	23	600		23											
18	43	600		43											1
19	18	500		18		18						18			
20	39	821		39											
21	6	828		6									2	1	
22	2	821		2											
23	13	500		13						13	13				
24	27	828		27											
25	25	828		25											
26	2	828		2											
27	32	500		32		32						32			
28	39	500		39	39				39	39	39				
29	49	500		49		49						49			
30	1	828		1											
31	27	500		27						27	27				
32	2	828		2											



STAND	ACRES	LAND	DESCRIPTION	FUELS	HARVEST				SILVICULTURE			WILDLIFE			
C-205		CLASS		Burn 3-5 Year Rotation	Seed Tree	Commercial Thinning			Reforestation	TSI		WSI	Nest Boxes	Pond	Pond
						70 BA pine; min 10% hwd comp	70 BA pine	20' spacing	Site Prep	Release	PCT			New	Reconst
33	4	828		4											
34	5	828		5											
35	3	828		3											
36	1	828		1											
37	6	826		6											
38	2	828		2											
39	1	828		1											
40	4	828		4											
41	2	826		2											
42	3	828		3											
43	14	540		14		14						14			
901	279		Private												
902	172		Private												
TOTAL	1474			1023	110	362	17	37	115	155	155	379	14	5	2



## Hole in the Ground Proposed Action Map

Cold Springs Ranger District  
Logan County, Arkansas

U.S. Forest Service - R8  
Ouachita National Forest

Map Creation Date - 3/25/17  
Map Revision Date - 4/20/17

For more information, contact the Cold Springs Ranger District at 2190 East Main, Booneville AR or phone (479) 637-4174.

- Hole in the Ground Trail Maintenance
- Existing Ponds - Maintenance
- Pond Construction
- Fireline Recon\_5.1 miles
- Logging Decks
- Temporary Road Construction
- Road Reconstruction
- Road Obliteration
- FS Road Pre Haul Maintenance

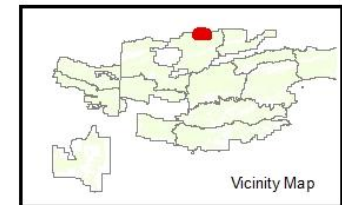
- ### Hole In The Ground Proposed Action
- Prescribed Burning 3 to 5 Year Intervals-all stands
  - Private - No Action

- Regeneration; Reforestation; TSI; Prescribed Burning; Fireline Construction
- Seedtree; Regeneration; Reforestation; TSI; Prescribed Burning; Fireline Construction

- Thin Pine to 20' Spacing; Prescribed Burning
- Thin Pine to 70 BA; WSI; Prescribed Burning

- Thin Pine to 70 BA w/minimum 10% hwd component; WSI; Prescribed Fire
- Timber Stand Improvement (TSI); Prescribed Burning
- Work Center; Prescribed Burning

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## Decision

Based on the analysis documented in the EA, it is my decision to implement the Proposed Action identified above for the West Haw Ecosystem Management Unit. My decision is based on a review of the record that shows a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgement of incomplete or unavailable information. See Relevant Planning Documents (EA Chapter 1 p. 17), Technical Requirements and Forest Plan Mitigations (EA Chapter 2 p. 19), and Literature Cited (EA Chapter 6 p. 93).

## Reasons for the Decision

1. The Proposed Action was chosen over Alternative I (No Action) because the No Action Alternative would not meet the identified purpose and need for this project as stated in the EA beginning on page 5.
2. The Proposed Action was chosen over Alternative II (Proposed Action without herbicide use) because herbicide is an effective treatment for the control of non-native invasive species.

Specifically, the Proposed Action would best meet the following project objectives (EA, p. 5, 22):

- TO MANAGE FOR OUACHITA MOUNTAINS-HABITAT DIVERSITY IN MANAGEMENT AREA 14
  - ❖ To maintain the primary community types (Ouachita Pine-Oak Forest, Ouachita Pine-Oak Woodland, and Ouachita Dry-Mesic Oak Forest)
  - ❖ To create a healthy forest condition
  - ❖ To reduce competing vegetation for nutrients, water, and sun
  - ❖ To increase growth rate and quality of desired trees by reducing competition for nutrients and water among species
- TO ENSURE REGENERATION STANDS ARE RESTOCKED
  - ❖ To site prep a bed for seed fall after the regeneration harvests
  - ❖ To create a suitable seedbed in regeneration sites after initial prescribed burning
  - ❖ To ensure survival of desired trees by releasing suppressed trees from competing tree species
- TO IMPROVE WILDLIFE HABITAT
  - ❖ To create suitable habitat for the ABB
  - ❖ To create early seral stage habitat
  - ❖ To create temporary wildlife openings
  - ❖ To provide new growth for wildlife to eat
  - ❖ To create water sources for wildlife.
  - ❖ To reduce midstory and allow development of grasses and forbs on the forest floor
  - ❖ To move toward the open road density objective
  - ❖ To stop or slow the infestation of invasive and non-native species
- TO IMPROVE ACCESS TO PROJECT AREA AND PROVIDE SAFE ROAD SYSTEM.
  - ❖ To repair or maintain road surfaces, ditch erosion, and repair or replace rusted-out pipes
  - ❖ To provide short-term access to harvest units
  - ❖ To reduce the impacts to streams and get rid of roads not needed in the future
- TO REDUCE FUEL LOADING.
  - ❖ To prevent natural resources from being damaged
  - ❖ To protect personal property from wildfires
  - ❖ To reduce wildfire intensity to provide a safer environment for fire fighters
- TO BE GOOD NEIGHBORS
  - ❖ To supply firewood areas and rock permits to the local community.
  - ❖ To ensure landlines are maintained.

## Role of the Interdisciplinary Team and Public Involvement

Public involvement began September 30, 2015. An email was sent with an electronic link to the detailed description of the Proposed Actions and associated maps using PALS's electronic mailing list. This list is created from those whom have shown interest in this project through the project website <http://www.fs.fed.us/nepa/fs-usda-pop.php/?project=47489>. In addition, a hardcopy was mailed and a direct email was sent to individuals informing them of the electronic link to the project information. A list of recipients is located in the project file at the district office. A 30-day comment period legal was published April 6, 2016. No one commented specifically to the proposals or the analysis.

Requests for information (i.e. status of the cultural resource survey) were received from Lindsey D. Bilyeu, NHPA Senior Section 106 Reviewer-Historic Preservation Department) with the Choctaw Nation of Oklahoma and John Fox with Osage Nation. Archeologist Lexie Rue-Harris responded to both by email. Responses are on file at the district office.

## Issues Identified

**Issue #1:** *Herbicide use is considered an "issue to be analyzed in depth" because of the intensity of interest that will require the formulation of a "non-herbicide" alternative. Herbicide use is proposed to achieve the desired conditions to establish native forest cover where needed. This would be to remove nonnative species such as mimosa or privet.*

**Issue #2:** *Road construction is considered an "issue to be analyzed in depth" because of the intensity of interest that will require the formulation of a "no road construction" alternative. Road construction is proposed to access forest stands proposed for harvest.*

## Alternatives Eliminated From Detailed Study

There were no issues or unresolved conflicts to drive the following additional alternative, but the interdisciplinary team considered the following:

### No Harvest Alternative

This alternative was considered by the Interdisciplinary Team but eliminated from detailed analysis because the Team felt the No Action Alternative adequately addressed the overall effects of a no harvest alternative.

## Alternatives Considered in Detail

Four alternatives were analyzed in the EA:

1. **Proposed Action** – This alternative is described on pages 4-12 of this document. (Also, see EA, pp. 20 and Appendix C).
2. **Alternative I (No Action)** - Under the No Action Alternative neither the Proposed Action nor any other action alternative would be implemented. (See EA, p. 21). Management activities would be deferred until a later entry. However, ongoing Forest Service approved activities would continue in the project area.
3. **Alternative II (Proposed Action without herbicide use)**- This alternative is the same as the Proposed Action except for herbicides are not proposed treatment of non-native invasive plant species (See EA, p. 21).
4. **Alternative III (No New Roads)**- Under this alternative, there would be no road construction (temporary or system); only proposed timber harvest (and dependent management actions) accessible by the current transportation system would occur (See EA, p. 22 and Appendix D).

### Forest Plan Mitigations (EA, p. 19)

The Forest-wide Design Criteria for Management Areas 9 and 14 are incorporated by reference as mitigating measures into the Proposed Action by smart design and are located on the website (as of 12/28/2016) at [http://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/fsm9\\_039613.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsm9_039613.pdf).

### Project Specific Protective Measures (EA, p. 11)

#### Soils

Allow heavy equipment operations on hydric soils, soils with a severe compaction hazard rating, and floodplains with frequent or occasional flooding hazard only during the months of July through November. Operations during December through June are allowed with the use of methods or equipment that do not cause excessive soil compaction. This standard does not apply to areas dedicated to intensive use, including but not restricted to administrative sites, roads, primary skid trails, log decks, campgrounds, and special use areas. (Revised Forest Plan, SW001, p. 74)

Allow heavy equipment operations on soils that have a high compaction hazard rating only during the months of April through November. Operations during December through March are allowed with the use of methods or equipment that do not cause excessive soil compaction. This standard does not apply to areas dedicated to intensive use, including but not restricted to administrative sites, roads, primary skid trails, log decks, campgrounds, and special use areas. (Revised Forest Plan, SW002, p. 74)

These standards apply to operations in the stands displayed in the tables below.

Harvesting Operating Seasons for Compaction			
Moderate-High (High) Rating of Soils Limited April through November Operating Season		Severe Rating of Soils Limited July through November	
COMPARTMENT	STAND	COMPARTMENT	STAND
204	06	205	03
205	01	205	04
205	04	205	08
205	10	205	28
205	12		
205	16		
205	23		
205	24		
205	25		
205	26		
205	31		

Harvesting Operating Seasons for Hydric Soils							
Floodplains with frequent or occasional Flooding Limited July through November Operating Season							
COMPARTMENT	STAND	COMPARTMENT	STAND	COMPARTMENT	STAND	COMPARTMENT	STAND
204	06	204	24	205	39	205	42
204	13	205	16	205	40		
204	17	205	19	205	41		

Soil loss from management actions will not exceed the estimated Forested T-factor for each soil or soil map unit based on the cumulative time period between soil disturbing management actions. (Revised Forest Plan, SW003 (3), p. 74). To meet this standard, in addition to installing water bars and seedling, deep tillage would be required



on log decks, as well as temporary roads and primary skid trails with slope grades of 15% or less, in the stands displayed in the table.

Stands Requiring Additional Erosion Control Measures	
Compartment	Stand
None	

#### Herbicide Use

- HU001 – Herbicides will be used only where necessary to achieve the desired condition in the treatment area, and then only when site specific analysis shows no unacceptable negative effects to human or wildlife health or the ecosystem as defined in HU002.
- HU002 – Herbicides will be applied at the lowest rate effective in meeting project objectives and according to guidelines for protecting human and wildlife health. Site-specific risk assessments are required prior to herbicide application and must be calculated using the procedure developed by Syracuse Environmental Research Associates (SERA).
- HU003 – To minimize potential effects of herbicide use, whenever possible, use individual stem treatments and directed spraying.
- HU004 – Herbicides that are not soil-active will be used in preference to soil-active ones when the vegetation management objectives can be met.
- HU006 – Clearly marked buffers will protect streamside zones, private land and public water supplies.
- HU010 – The use of herbicides is prohibited in the immediate vicinity of Proposed, Endangered, or Threatened plants.
- HU011 – Within a 300-foot buffer from any source waters (public water supply), do not apply herbicide treatments unless a site-specific analysis supports use within the designated buffer to prevent more serious environmental damage than is predicted if pesticides are used.
- HU012 – No herbicide mixing, loading, or cleaning areas will occur within a 300-foot buffer of private land, open water, source waters (public water supply), wells, or other sensitive areas.
- HU018 – A certified pesticide applicator will administer all pesticide application contracts and will supervise any Forest Service personnel involved with the application of pesticides on the Forest.

#### Heritage

The following measures only apply to cultural resource sites that are unevaluated, eligible for listing, or listed in the National Register of Historic Places.

##### **HP1: Site Avoidance During Project Implementation**

Avoidance of historic properties (HP) will require the protection from effects resulting from the undertaking. Effects will be avoided by (1) establishing clearly defined site boundaries and buffers around archeological sites where activities that might result in an adverse effect. Buffers will be of sufficient size to ensure that integrity of the characteristics and values which contribute to, or potentially contribute to, the properties' significance will not be affected, and (2) routing proposed new roads, temporary roads, log landings and skid trails away from historic properties;

##### **HP2: Site Protection During Prescribed Burns**

- *Firelines.* Historic properties located along existing non-maintained woods roads used as fire lines will be protected by hand-clearing those sections that cross the sites. Although these roads are generally cleared of combustible debris using a small dozer, those sections crossing archeological sites will be cleared using leaf blowers and/or leaf rakes. There will be neither removal of soil, nor disturbance below the ground surface, during fireline preparation. Historic properties and features located along proposed routes of mechanically-constructed firelines, where firelines do not now exist, will be avoided by routing

fireline construction around historic properties. Sites that lie along previously constructed dozer lines from past burns where the firelines will be used again as firelines, will be protected during future burns by hand clearing sections of line that cross the site, rather than re-clearing using heavy equipment. Where these activities will take place outside stands not already surveyed, cultural resources surveys and regulatory consultation will be completed prior to project implementation. Protection measures, HP1, HP3, and HP4, will be applied prior to project implementation to protect historic properties.

- *Burn Unit Interior.* Combustible elements at historic properties in burn unit interiors will be protected from damage during burns by removing excessive fuels from the feature vicinity and, as necessary, by burning out around the feature prior to igniting the main burn, creating a fuel-free zone. Burn out is accomplished by constructing a set of two hand lines around the feature, approximately 30 to 50 feet apart, and then burning the area between the two lines while the burn is carefully monitored. Combustible features located in a burn unit will also be documented with digital photographs and/or field drawings prior to the burn. Historic properties containing above ground, non-combustible cultural features and exposed artifacts will be protected by removing fuel concentrations dense enough to significantly alter the characteristics of those cultural resources. No additional measures are proposed for any sites in the burn interior that have been previously burned or that do not contain combustible elements or other above ground features and exposed artifacts as proposed prescribed burns will not be sufficiently intense to cause adverse effects to these features.
- *Post-Burn Monitoring.* Post-burn monitoring may be conducted at selected sites to assess actual and indirect effects of the burns on the sites against the expected effects. SHPO consultation will be carried out with respect to necessary mitigation for any sites that suffer unexpected damage during the burn or from indirect effects following the burn.

### ***HP3: Other Protection Measures***

If it is not feasible or desirable to avoid an historic property that may be harmed by a project activity (HP1), then the following steps will be taken: (1) In consultation with the Arkansas SHPO, the site(s) will be evaluated against NRHP significance criteria (36 CFR 60.4) to determine eligibility for the NRHP. The evaluation may require subsurface site testing; (2) In consultation with the Arkansas SHPO, tribes and nations, and with the ACHP if required, mitigation measures will be developed to minimize the adverse effects on the site, so that a finding of No Adverse Effect results; (3) The agreed-upon mitigation measures will be implemented prior to initiation of activities having the potential to affect the site.

### ***HP4: Discovery of Cultural Resources during Project Implementation***

Although cultural resources surveys were designed to locate all NRHP eligible archeological sites and components, these may go undetected for a variety of reasons. Should unrecorded cultural resources be discovered, activities that may be affecting that resource will halt immediately; the resource will be evaluated by an archaeologist, and consultation will be initiated with the SHPO, tribes and nations, and the ACHP, to determine appropriate actions for protecting the resource and mitigating adverse effects. Project activities at that locale will not resume until the resource is adequately protected and until agreed-upon mitigation measures are implemented with SHPO approval.

### ***Scenery***

The following technical requirements are informed by the Southern Region's Scenery Treatment Guide (April, 2008) for regeneration harvests.

- Trees should be selectively removed to improve scenery within high use areas, vista points, and along interpretive trails.

- Flowering and other visually attractive trees and understory shrubs should be favored when leaving vegetation.
- During permanent road construction, slash should be removed from view in the immediate foreground to the extent possible. Slash may be aligned parallel to roads at the base of fill slopes to collect silt, but usually only if it provides this function.
- Slash should be burned or lopped to within an average of 2 feet of ground, when visible within 100 feet on either side of Concern Level 1 travel routes. Slash should be treated to within an average of 4 feet of the ground when visible within 100 feet on either side of Concern Level 2 travel routes.
- Root wads and other unnecessary debris should be removed or placed out of sight within 100 feet of key viewing points.
- Stems should be cut to within 12 inches of the ground in the immediate foreground.
- Special road and landing design should be used. When possible, log landings, roads and bladed skid trails should be located out of view to avoid bare mineral soil observation from Concern Level 1 and 2 travel routes.
- The visual impact of roads and constructed fire lines should be blended so that they remain subordinate to the existing landscape character in size, form, line, color, and texture.
- Openings and stand boundaries should be organically shaped. Straight lines and geometric should be avoided. Edges should be shaped and/or feathered where appropriate to avoid a shadowing effect in the cut unit. Openings should be oriented to contours and existing vegetation patterns to blend with existing landscape characteristics, as appropriate.
- Cut and fill slopes should be revegetated to the extent possible. Cut banks should be sloped to accommodate natural revegetation.

## MONITORING

The Revised Forest Plan lists monitoring activities for the Ouachita National Forest. The Forest's monitoring program is designed to evaluate the environmental effects of actions similar to those proposed in this project, and also serves to assess the effectiveness of treatments. In order to ensure that the appropriate design criteria protecting soil stability, water quality, and other resources are followed, trained contract administrators and inspectors would be on-site during the implementation phase of the project. For those activities that include the use of herbicides, surveillance monitoring to ensure that herbicide label instructions are being followed would be conducted as part of the contract administration. Form R8-FS-2100-1, Herbicide Treatment and Evaluation Record, would be used to monitor work involving herbicides. Stream samples would also be taken to monitor for offsite movement.

## **Finding of No Significant Impact (FONSI)**

I have determined that the proposed actions are not a major federal action, either individually or cumulatively, and will not significantly affect the quality of the human environment based on the EA and from past experience with similar forest management activities. Therefore, an environmental impact statement is not necessary. This determination is based upon the following factors:

1. Both beneficial and adverse effects have been considered and this action will not have a significant effect on the quality of the human environment (EA, Chapter 3 Environmental Disclosures).
2. The degree to which public health and safety may be affected is minimal (EA, pp. 83).
3. The project will not affect any unique characteristics of the geographic area (historic or cultural resource, wetlands, and floodplains, etc.). This is based on information gathered through records and site specific field inventories (EA, p. 43, and 88).
4. Based on public involvement and the analyses conducted in the EA, the effects on the quality of the human environment are not likely to be highly controversial (EA, p. 17 and Chapter 3 Environmental Disclosures).
5. The actions do not involve highly uncertain, unique, or unknown environmental risks to the human environment. All actions described have been conducted before, and district staff members have considerable expertise in carrying out these actions (EA, Chapter 3 Environmental Disclosures).
6. The actions in this decision will not establish a precedent for future actions with significant effects nor does it represent a decision in principle about a future consideration (EA, Chapter 3 Environmental Disclosures).
7. The cumulative effects of the proposed actions have been analyzed with consideration for past and foreseeable future activities on adjacent public and private land, and no significant cumulative effects would result from implementation (EA, p. 16) and Chapter 3 Environmental Disclosures).
8. The actions will not affect any sites listed in or eligible for listing in the National Register of Historic Places nor will they cause loss or destruction of significant scientific, cultural or historic resources. This is based on site specific cultural resource surveys conducted on the analysis area, preparation of a Cultural Resources Report, and consultation on the proposed project with the Arkansas State Historic Preservation Officer. (EA, pp. 88).
9. The actions are not likely to significantly affect endangered or threatened plant or animal species or critical habitat under the Endangered Species Act (EA, pp. 52-61 and Biological Evaluation).
10. None of the actions threaten to lead to violation of federal, state, or local laws imposed for the protection of the environment. This will be ensured by carrying out the decision in a way that is consistent with the forest-wide design criteria, management requirements and mitigation measures established in the Revised Forest Plan. For water quality management, State approved Best Management Practices will be used for this project. The project will be monitored to ensure BMPs are implemented. If implementing BMPs on a specific site results in effects significantly higher than anticipated, because of unforeseen site factors or events, appropriate corrective measures will be considered and implemented. This project will fully comply with State approved BMPs and the Clean Water Act (EA, pp. 43).

## **Findings Required by Other Laws and Regulations**

I have determined that actions included in this decision are consistent with the Revised Forest Land and Resource Management Plan for the Ouachita National Forest because the selected alternative has been planned and will be implemented in accordance with all applicable design criteria of the Revised Forest Plan (EA, p. 19). The actions described in the selected alternative are typical of those projected for implementation in the Revised

Land and Resource Management Plan and for which the environmental effects are disclosed in the Final Environmental Impact Statement (FEIS). This environmental assessment tiers to the FEIS (EA, p. 19).

### **National Forest Management Act (NFMA)**

Under 16 U.S.C. 1604 (g)(3)(E), a Responsible Official may authorize site-specific projects and activities on NFS lands to harvest timber only where:

1. Soil, slope, or other watershed conditions will not be irreversibly damaged (EA, p. 38).
2. There is assurance that the lands can be adequately restocked within five years after final regeneration harvest; hand-planting will occur if natural regeneration is inadequate (EA, p. 54).
3. Protection is provided for streams, streambanks, shorelines, lakes, wetlands, and other bodies of water from detrimental changes in water temperatures, blockages of water courses, and deposits of sediment where harvests are likely to seriously and adversely affect water conditions or fish habitat; protection is provided by adherence to minimum widths of streamside management areas (SMAs), protected areas adjacent to bodies of water and on each side of perennial streams and other streams with defined channels (Revised Forest Plan, pp. 43).
4. The harvesting system to be used is not selected primarily because it will give the greatest dollar return or the greatest unit output of timber. See EA, Purpose & Need, pp. 5.

A Responsible Official may authorize site-specific projects and activities on NFS lands using clearcutting, seed tree cutting, shelterwood cutting, and other cuts designed to regenerate an even-aged stand of timber as a cutting method only where:

1. For clearcutting, it is determined to be the optimum method; for other cutting methods it is determined to be appropriate and meets the objectives and requirements of the applicable land management plan (16 U.S.C. 1604 (g)(3)(F)(i)). See EA, Purpose & Need, pp. 5 EA.
2. The interdisciplinary review has been completed and the potential environmental, biological, aesthetic, engineering, and economic impacts on each advertised sale area have been assessed, as well as the consistency of the sale with the multiple use of the general area (16 U.S.C. 1604 (g)(3)(F)(ii)). See EA, Chapter 3.
3. Cut blocks, patches, or strips are shaped and blended to the extent practicable with the natural terrain (16 U.S.C. 1604 (g)(3)(F)(iii)). The Scenery Treatment Guide-Southern Region National Forests will be followed (EA, p. 86).
4. These cuts are carried out according to the maximum size limits for areas to be cut in one harvest operation as required by 16 U.S.C. 1604 (g)(3)(F)(iv)). Cuts are carried out according to the maximum size of regeneration area for even-aged management under Design Criteria FR009 (Revised Forest Plan, p. 81).
5. Timber cuts are carried out in a manner consistent with the protection of soil, watershed, fish, wildlife, recreation, and esthetic resources, and the regeneration of the timber resource (16 U.S.C. 1604 (g)(3)(F)(v)). See EA, Chapters 2 & 3.
6. Under 16 U.S.C. 1604 (m) even-aged stands of trees scheduled for regeneration harvest generally have reached culmination of mean annual increment of growth, unless the purpose of the timber cutting is excepted in the land management plan. Regeneration harvests are in compliance with Design Criteria FR009, Harvest Age (Revised Forest Plan page 81).

### **OBJECTION OPPORTUNITIES**

This decision is not subject to objection pursuant to 36 CFR 218; no comments were received in response to any solicitation.



**IMPLEMENTATION DATE**

As per 36 CFR 218.12, this decision may be signed and implemented immediately.

**Contact**

For further information on this decision, contact Donna Reagan, Cold Springs Ranger District, PO Box 417, Booneville, AR 72927; phone (479) 675-4743 ext. 107; email [dreagan@fs.fed.us](mailto:dreagan@fs.fed.us).

**Responsible Official**

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**Jonny Fryar**  
**District Ranger Jonny Frayar**

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**12/14/2017**  
**DATE**